

AMENDED CLAIM SET:

1. (Currently amended) A peptide comprising a portion of [[a]] an endostatin protein selected from the group consisting of plasminogen, endostatin, VEGF, and KDR/FLK-1, wherein said peptide is of length from 7-20 amino acids long and contains a pair of proline residues at least one of which is a terminal residue or a residue penultimate to a terminus of the peptide, and wherein said peptide exhibits an IC₅₀ of 20 μM or less in a bovine aorta endothelial cell proliferation assay or exhibits inhibition of angiogenesis in a chick chorioallantoic membrane assay of at least 30% at a dose of 50 μg/coverslip.

2. (original) The peptide of claim 1 that exhibits an IC₅₀ of 20 nM to 20 mM in a bovine aorta endothelial cell assay or exhibits inhibition of angiogenesis in a chick chorioallantoic membrane assay of at least 50% at a dose of 10 to 25 μg/coverslip.

3. – 5. (cancelled)

6. (original) The peptide of claim 1 that lacks any cysteine or if it contains any cysteine, the cysteine is blocked to prevent disulfide formation.

7. (currently amended) The peptide of claim 1 that ~~is derived from endostatin, VEGF, and KDR/FLK-1~~ and has a length of ~~from~~ 9 to 20 amino acids long.

8. (original) The peptide of claim 7 that lacks any cysteine or if it contains any cysteine, the cysteine is blocked to prevent disulfide formation.

9. (cancelled).

10. (withdrawn – currently amended) The peptide of claim 1, comprising a peptide having an amino acid sequence selected from the group consisting of SEQ ID NOS: 29-32 ~~SEQ ID NOs 1-3, 11, 12, and 29-35~~.

11. (cancelled).

12. (cancelled).

13. (original) A pharmaceutical composition comprising a peptide according to claim 1 and a pharmaceutically acceptable carrier.

14. (original) The composition according to claim 13, wherein said composition provides a unit dose of from 20 µg/kg/day to 2 mg/kg/day.

15. (withdrawn) A pharmaceutical composition comprising a peptide according to claim 10 and a pharmaceutically acceptable carrier.

16. (withdrawn) The composition according to claim 15, wherein said composition provides a unit dose of from 20 µg/kg/day to 2 mg/kg/day.

17. (cancelled).

18. (cancelled).

19. (currently amended) A method for ~~preventing or treating undesired~~ inhibiting angiogenesis in a tumor comprising administering to a subject at risk for or presenting a tumor ~~undesired angiogenesis~~ an effective amount of the composition of claim 13 to a subject.

20. (withdrawn – currently amended) A method for ~~preventing or treating undesired~~ inhibiting angiogenesis in a tumor comprising administering to a subject at risk for or presenting ~~undesired angiogenesis~~ a tumor an effective amount of the composition of claim 15 to a subject.

21. (cancelled).

22. (currently amended) A method for preventing or treating primary tumor growth or metastasis by preventing ~~undesired~~ or inhibiting tumor angiogenesis, said method comprising administering to a subject at risk for or presenting a tumor an effective amount of the composition of claim 13.

23. (withdrawn – currently amended) A method for preventing or treating primary tumor growth or metastasis by preventing ~~undesired~~ or inhibiting tumor angiogenesis, said method comprising administering the composition of claim 15 to a subject at risk for or presenting a tumor.

24. (cancelled).

25. (previously presented) The peptide of claim 1, comprising the peptide having the amino acid sequence of SEQ ID NO:30.

26. (previously presented) A pharmaceutical composition comprising the peptide according to claim 25 and a pharmaceutically acceptable carrier.

27. (currently amended) A method for ~~preventing or treating undesired~~ inhibiting angiogenesis in a tumor comprising administering to a subject at risk for or presenting a tumor ~~undesired angiogenesis~~ an effective amount of the composition of claim 26 to a subject.

28. (currently amended) A method for preventing or treating primary tumor growth or metastasis by preventing ~~undesired~~ or inhibiting tumor angiogenesis, said method comprising administering to a subject at risk for or presenting a tumor an effective amount of the composition of claim ~~26~~ 25.

29. (new) The peptide of claim 1, having two proline residues each being located penultimate to a terminus of the peptide.